

Since 1999

ISSN 2226-7425

*The journal of scientific articles "Health & education millennium", 2013, tom 15 № [1-4]**Vepryuk Yu. M.*

THE AGE FEATURES OF THE IONO-REGULATING RENAL FUNCTION UNDER INFLUENCE OF THE ALUMINUM AND LEAD SALTS IN PINEAL GLAND HYPOFUNCTION

Bukovynian State Medical University, Department of Medical Biology, Genetics and Pharmacy Botany, Chernivtsi, Ukraine

Abstract. In experiments on 36 subadult and adult male albino rats of non-linear mass, respectively 0,60-0,10 kg and 0,14-0,20 kg showed that the studied environmental burden of lead chloride is accompanied by a nephrotoxic effect in mature rats with respect to immature animals. Additional administration of aluminum salts on the background of lead salts are characterized by less nephrotoxic effect through reducing of the proteinuria degree and loss of sodium excretion in adult and subadult animals.

Keywords: kidney, lead chloride, aluminum chloride, pineal gland.

• •

-
-

,
, ,

36

0,60-0,10

0,14-0,20

,

-

-

-

-

• : , , , •

• ,	- Na ⁺ - K ⁺ -	- ,	-
	1,		-
SH-	-		-
	-		-
,	-	[1, 2, 3, 4].	
,	-		

~ 243 ~

() .

77-49390

() .

	(Al+Pb) (n=6)	($\bar{x} \pm S_x$) (n=6)
0,5 0,03	0,5 0,05	
0,74 0,18	0,99 0,23	
0,04 0,0002	0,003 0,0003 p<0,001	
121,7 1,83	128,21 1,83 p<0,05	
1,29 0,05	1,11 0,05 p<0,05	
24,24 9,7	26,0 10,37	

: 1. p –
 . 2. n –



2

-

$$(\bar{x} \pm S_x)$$

	(Al+Pb) (n=6)	(n=6)
, /	1,14 0,05	0,7 0,03 p<0,001
, / 2 / 100	2,36 0,37	1,96 0,26
, / / 100	22,71 4,42	39,82 5,94 p<0,05
, / / 100	2,53 0,27	2,17 0,17 p<0,02
, /2 /100	2,29 0,09	3,19 0,08 p<0,001
, . .	0,008 0,0001	0,005 0,0002 p<0,001
, / 2 / 100	293,4 21,51	420,36 75,04
, / 2 / 100	5,41 2,23	1,26 0,65

: 1. p –

. 2. n –

.

(. 3) ,

- | . . . ,

-
-
-
-
-

3

$$(\bar{x} \pm S_x)$$

	(Al+Pb) (n=6)	(AL+Pb) (n=6)
, /	1,36 0,07	0,86 0,10 p<0,01
, / 2 / 100	3,71 0,51	1,65 0,39 p<0,01



().

77-49390

().

/ / 100	, 30,64 4,69	11,03 2,55 p<0,01
/ / 100	, 3,95 0,38	1,82 0,32 p<0,01
/2 /100	, 2,94 0,13	2,24 0,32 p<0,001
/2 / 100	0,02 0,003	0,01 0,003 p<0,05
, .	0,01 0,0006	0,007 0,0009 p<0,05
, /	131,4 1,53	122,5 1,42 p<0,01
, /100	1,43 0,09	2,48 0,23 P<0.01

. 2. n –

1. ...
/ ... //
- 2004. - . . ., 2, .2. - .293-295.
2. ...
3. ...
/ ... //
- 2009. .XII, 2. - .119-123.
4. ...
/ [... , ...] //
- 2011. - .338.
5. Effect of xenobiotics in mature and immature rats under conditions of pineal gland hipo- and hiperfunction/ [U.M Vepryuk, N.M. Shumko, V.G Vysotska, M. Biliichuk] // "13th Craiova International Medical Students Conference". Craiova, 10-13 november 2011y.
6. Stepanchuk V.V. The role of the pineal gland in the regulation the moon's rhythms of the renal activiti / O.V. Zagariichuk, V.V. Stepanchuk, Y.M. Vepryuk // XI International Congress of Medical Sciences. - 2012. Sofia, Bulgaria. - 03-06 May, 2012. — V. LXIV. — P.244.
7. ...
/ [... , ...] //
- 2012. - .164